

## Chronic Disease Indicators: Indicator Definition



### Pneumococcal vaccination among adults aged $\geq 65$ years

Category:	Other Diseases and Risk Factors
Demographic Group:	Resident persons aged $\geq 65$ years.
Numerator:	Respondents aged $\geq 65$ years who report ever having received a pneumococcal vaccination.
Denominator:	Respondents aged $\geq 65$ years who report having or not ever having received a pneumococcal vaccination (exclude unknowns and refusals).
Measures of Frequency:	Annual prevalence — crude and age-adjusted (standardized by the direct method to the year 2000 standard U.S. population, master list) — with 95% confidence interval.
Time Period of Case Definition:	Ever vaccinated.
Background:	Although vaccination rates have been increasing, in 2003, only 64% of adults aged $\geq 65$ years were ever vaccinated against pneumococcal disease. In 2003, $>3300$ adults aged $\geq 65$ years died from bacteremic pneumococcal pneumonia or other forms of invasive pneumococcal disease.
Significance :	Ever having received a pneumococcal vaccination might prevent or attenuate the clinical course of serious or invasive illness attributable to <i>Streptococcus pneumoniae</i> . With the aging of the population, increasing numbers of adults will be at risk for these diseases and their complications.
Limitations of Indicator:	Respondents might not distinguish between influenza and pneumococcal ( <i>Streptococcus pneumoniae</i> ) vaccinations. The reliability and validity of this measure is unknown. Indicator does not measure vaccination rates among other populations at high risk, including persons with chronic illness who should also be vaccinated.
Data Resources:	Behavioral Risk Factor Surveillance System (BRFSS). <a href="http://apps.nccd.cdc.gov/brfss/">http://apps.nccd.cdc.gov/brfss/</a>
Limitations of Data Resources:	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage (e.g., lower telephone coverage among populations of low socioeconomic status), nonresponse (e.g., refusal to participate in the survey or to answer specific questions), or measurement (e.g., social desirability or recall bias).
Healthy People 2010 Objectives:	14-29: Increase the proportion of adults (noninstitutionalized adults aged $\geq 65$ years) who are vaccinated annually against influenza and are ever vaccinated against pneumococcal disease. (14-29b is specific for pneumococcal vaccine.)